

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS P.O. Box 1450 Alexandria, Vinginia 22313-1450 www.uspto.gov

| APPLICATION NO.                        | FILING DATE   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |  |
|--|---------------|----------------------|---------------------|------------------|--|--|
| 10/086,749 02/28/2002                  |               | William A. Montague  | 0252/US 8762        |                  |  |  |
| 75                                     | 05/15/2003    |                      |                     |                  |  |  |
| FRANCIS J. CAUFIELD<br>6 APOLLO CIRCLE |               |                      | EXAMINER            |                  |  |  |
| · ·                                    | MA 02421-7025 |                      | VORTMAN,            | ANATOLY          |  |  |
|  |               |                      | ART UNIT            | PAPER NUMBER     |  |  |
|  |               |                      | 2835                |                  |  |  |

DATE MAILED: 05/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |  |  |  |  | <u></u>      |
|---|--|--|--|--|--------------|
|   |  | Application No.                        |  | Applicant(s)   |              |
| Office Antique O                                      |  | 10/086,749                             |  | MONTAGUE, WILLIAM A.   |              |
|   | Office Action Summary  | Examiner                               |  | Art Unit   |              |
|   |  | Anatoly Vortman                        |  | 2835   |              |
| Period fo   | The MAILING DATE of this communication ap<br>or Reply  | pears on the cove                      | r sheet with the co  | orrespondence add  | dress        |
| I HE I - Exter after - If the - If NC - Failu - Any r | ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a repoperiod for reply is specified above, the maximum statutory period reto reply within the set or extended period for reply will, by statutively received by the Office later than three months after the mailing ad patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, how               | ever, may a reply be time<br>nimum of thirty (30) days<br>SIX (6) MONTHS from to | ely filed will be considered timely. he mailing date of this con | mmunication. |
| 1)⊠   | Responsive to communication(s) filed on 28   | February 2002 .                        |  |  |              |
| 2a)□  | This action is <b>FINAL</b> . 2b)⊠ Th  | nis action is non-fi                   | nal.   |  |              |
| 3) <u>□</u><br>Dispositi                              | Since this application is in condition for allow closed in accordance with the practice under on of Claims   | ance except for fo<br>Ex parte Quayle, | rmal matters, pro<br>1935 C.D. 11, 45  | osecution as to the<br>53 O.G. 213.                              | merits is    |
| 4)🖂   | Claim(s) 33 is/are pending in the application.   |  |  |  | •            |
|   | 4a) Of the above claim(s) is/are withdra   | wn from considera                      | ation.   |  |              |
|   | Claim(s) 31 is/are allowed.  |  | 24.071.  |  |              |
|   | Claim(s) <u>1-10,23,27-30,32 and 33</u> is/are reject  | ed.                                    |  |  |              |
|   | Claim(s) <u>11-22 and 24-26</u> is/are objected to.  |  |  |  |              |
|   | Claim(s) are subject to restriction and/o  | r election requirer                    | ment.  |  |              |
|   | on Papers  | •                                      |  |  |              |
| ר □(9   | The specification is objected to by the Examine  | r.                                     |  |  |              |
| 10)□ Т  | The drawing(s) filed on is/are: a)☐ acce   | oted or b) objecte                     | ed to by the Exam  | iner.  |              |
|   | Applicant may not request that any objection to the  | e drawing(s) be held                   | d in abeyance. See   | e 37 CFR 1.85(a).  |              |
| 11)∐ T  | he proposed drawing correction filed on  | _ is: a)∐ approve                      | d b)⊡ disapprov  | ed by the Examiner   |              |
|   | If approved, corrected drawings are required in rep  |  | ion.   |  |              |
| 12)∐ T  | he oath or declaration is objected to by the Ex  | aminer.                                |  |  |              |
| Priority u  | nder 35 U.S.C. §§ 119 and 120  |  |  |  |              |
| 13) 🗌 .   | Acknowledgment is made of a claim for foreigr  | priority under 35                      | U.S.C. § 119(a)-   | (d) or (f).  |              |
| a)[   | ☐ All b)☐ Some * c)☐ None of:  |  |  |  |              |
|   | <ol> <li>Certified copies of the priority documents</li> </ol>   | s have been recei                      | ved.   |  |              |
| :   | <ol><li>Certified copies of the priority documents</li></ol>   | s have been recei                      | ved in Applicatior   | n No   |              |
|   | 3. Copies of the certified copies of the prior application from the International Buree the attached detailed Office action for a list   | reau (PCT Rule 1                       | 7.2(a)).   |  | tage         |
|   | cknowledgment is made of a claim for domestic  |  |  |  | polication)  |
| a)<br>15)∏ A  | The translation of the foreign language procknowledgment is made of a claim for domesti  | visional applicatio                    | n has been recei   | ved.   | ppcac        |
| ttachment(  |  |  |  |  |              |
| )  Notice<br>)  Informa                               | of References Cited (PTO-892)<br>of Draftsperson's Patent Drawing Review (PTO-948)<br>ation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> .  | 5) 📙 1                                 | Interview Summary (F<br>Notice of Informal Par<br>Other:                         | PTO-413) Paper No(s)<br>tent Application (PTO-                   | 152)         |
| Patent and Trac<br>O-326 (Rev.                        |  | tion Summary                           |  | Part of D  | aner No. 3   |

Art Unit: 2835

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1, 2, 5, 8, and 10, are rejected under 35 U.S.C. 102(b) as being <u>clearly</u> anticipated by US/4,484,185 to Graves.

Regarding claim 1, Graves disclosed (Fig. 1, 2 and 10) an identical electrical safety connector fuse (10) as claimed in claim 1, including a sealed housing (12), live and neutral apertures (28, 30) for receiving prongs of a plug, live and neutral prongs (16, 14) for engaging live and neutral receptacles of an electrical socket, a fuse (124) connected to said live prong (16), a live receptacle (24) connected to said fuse (124), and a neutral receptacle (22) electrically connected to said neutral prong (14).

Regarding claim 2, Graves disclosed a ground aperture, a ground prong extending outwardly from said housing (12) and a ground receptacle positioned in said housing (12) (between receptacles (22, 24)) adjacent said ground aperture, (Fig. 10).

Regarding claim 5, Graves disclosed means (70, 72) for releasably securing said connector fuse (10) to the electrical socket (62, 64), (Fig. 1, 6).

Application/Control Number: 10/086,749 Page 3

Art Unit: 2835

Regarding claims 8 and 10, Graves disclosed a light emitting means (light emitting diode (35a)) electrically connected to said live and neutral receptacles (22, 24) and positioned adjacent a light-transmissive portion (46a) of the housing (12), (Fig. 10).

3. Claim 30 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by US/2,226,148 to Taylor.

Taylor disclosed a precisely identical electrical plug as claimed in claim 30, including prongs (12) having outward surfaces with portions formed from an electrically insulating material (13).

# Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graves in view of GB/2,373,377 to Blair et al., (Blair).

Regarding claims 3 and 4, Graves disclosed all of the claims limitations as apply to claim 1 above, but did not disclose Braille markings on the connector housing.

Blair disclosed an electrical connector (i.e. plug) (Fig. 1) having Braille markings (2) for identification purposes.

Art Unit: 2835

Since inventions of Graves and of Blair are from the same field of endeavor (electrical connectors (i.e. plugs)) the purpose of the Braille markings taught by Blair would be recognized in the invention of Graves.

It would have been obvious to a person of ordinary skill in the fuse or connector arts at the time the invention was made to provide Braille markings as taught by Blair on the connector housing of Graves for identification purposes.

6. Claims 6 and 7, are rejected under 35 U.S.C. 103(a) as being unpatentable over Graves in view of US/4,071,872 to Phillips, Jr., (Phillips).

Graves disclosed all of the claims limitations as apply to claim 5 above, but did not disclose a flange with an aperture adapted to replace a faceplate of the electrical socket.

Phillips disclosed (Fig. 1 and 2) a connector (22) having a connector housing (30, 44) comprising a flange (28) extending laterally from said housing and having at least one aperture (62) extending therethrough such that a fastener (a screw) can be inserted through said aperture (62) to secure said connector to the socket.

Since inventions of Graves and of Phillips are from the same field of endeavor (electrical connectors (i.e. plugs)) the purpose of the flange with the aperture formed therethrough disclosed by Phillips would be recognized in the invention of Graves.

It would have been obvious to a person of ordinary skill in the fuse or connector arts at the time the invention was made to provide said housing of Graves with a flange having an aperture formed therethrough as taught by Phillips in order to secure said connector of Graves to

Art Unit: 2835

the face plate of the socket, thus preventing accidental separation of said connector from the socket.

The functional limitation of claim 7, that "said flange is adapted to replace the face plate" while being considered has not been given patentable weight, because it is narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a "means" for performing the specified function, as set forth in 35 USC § 112, 6th paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. In re Fuller, 1929 C.D. 172; 388 O.G. 279. Also, it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Graves in view of US/3,539, 961 to Worthington.

Regarding claim 9, Graves disclosed all the limitations as apply to claim 8, but did not disclose a resistor connected in series with the light emitting means.

Worthington disclosed an electrical connector (Fig. 4 and 5) having a light emitting means (30) and a resistor (80) connected in series with said light emitting means (30) so as to prevent shunting of the load current to said light emitting means (column 3, lines 35+).

Since inventions of Graves and of Worthington are from the same field of endeavor (electrical connectors (i.e. plugs)), the purpose of the resistor disclosed by Worthington would be recognized in the invention of Graves.

Art Unit: 2835

It would have been obvious to a person of ordinary skill in the fuse or connector arts at the time the invention was made to provide a resistor connected in series with the light emitting means of Graves as taught by Worthington in order to prevent shunting of the load current to the light emitting means of Graves.

8. Claims 23, 27-29, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graves in view of US/2,226,148 to Taylor.

Regarding claim 32, Graves disclosed (Fig. 1, 2 and 10) an identical electrical safety connector fuse (10) as claimed in claim 32, including a sealed housing (12), live and neutral apertures (28, 30) for receiving prongs of a plug, live and neutral prongs (16, 14) for engaging live and neutral receptacles of an electrical socket, a fuse (124) connected to said live prong (16), a live receptacle (24) connected to said fuse (124), and a neutral receptacle (22) electrically connected to said neutral prong (14), but did not disclose that said live and neutral prongs have root sections of outward surfaces substantially formed from insulating material and tip portions formed from an electrically conducting material.

Regarding claims 23 and 27-29, Graves disclosed all of the claims limitations as apply to claim 1, but did not disclose that said live and neutral prongs have root sections of outward surfaces substantially formed from insulating material and tip portions formed from an electrically conducting material.

Taylor disclosed (Fig. 1) a connector (2) having neutral and live prongs (12) comprising root sections of outward surfaces substantially formed from insulating material (13) so as to

Art Unit: 2835

prevent short circuit across partially withdrawn (from socket) prongs (column 2, lines 45+) and tip portions (12') formed from an electrically conducting material.

Since inventions of Graves and of Taylor are from the same field of endeavor (electrical connectors (i.e. plugs)), the purpose of partially insulated prongs disclosed by Taylor would be recognized in the invention of Graves.

It would have been obvious to a person of ordinary skill in the fuse or connector arts at the time the invention was made to provide prongs of Graves with the insulated root sections as taught by Taylor in order to prevent short circuit across partially withdrawn (from socket) prongs, thus enhancing safety of the device.

9. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Graves in view of Taylor and further in view of US/4,632,479 to Jacobson.

Regarding claim 33, Graves disclosed (Fig. 1, 2 and 10) an identical electrical safety connector fuse (10) as claimed in claim 33, including a sealed housing (12), live and neutral apertures (28, 30) for receiving prongs of a plug, live and neutral prongs (16, 14) for engaging live and neutral receptacles of an electrical socket, a fuse (124) connected to said live prong (16), a live receptacle (24) connected to said fuse (124), and a neutral receptacle (22) electrically connected to said neutral prong (14), but did not disclose that said live and neutral prongs have root sections of outward surfaces substantially formed from insulating material and tip portions formed from an electrically conducting material and that a blocking member is disposed within the housing so as to block said neutral and live apertures.

Art Unit: 2835

Taylor disclosed (Fig. 1) a connector (2) having neutral and live prongs (12) comprising root sections of outward surfaces substantially formed from insulating material (13) so as to prevent short circuit across partially withdrawn (from socket) prongs (column 2, lines 45+) and tip portions (12') formed from an electrically conducting material.

Since inventions of Graves and of Taylor are from the same field of endeavor (electrical connectors (i.e. plugs)), the purpose of the partially insulated prongs disclosed by Taylor would be recognized in the invention of Graves.

It would have been obvious to a person of ordinary skill in the fuse or connector arts at the time the invention was made to provide prongs of Graves with insulated root sections as taught by Taylor in order to prevent short circuit across partially withdrawn (from socket) prongs, thus enhancing the safety of the device.

Further, Jackobson disclosed (Fig. 1) an electrical receptacle (10) having apertures (18, 20) for accepting prongs of a plug (24), wherein said receptacle comprising blocking members (26, 28) disposed in a housing of said receptacle (10) so as to block said apertures (18, 20) in order to prevent tampering and insertion of the metal objects into the apertures of the receptacle (column 4, lines 66+, column 5, lines 1+).

Since inventions of Jackobson, Graves and of Taylor are from the same field of endeavor (electrical connectors (i.e. plugs)), the purpose of the blocking members disclosed by Jackobson would be recognized in combination of Graves and Taylor.

It would have been obvious to a person of ordinary skill in the fuse or connector arts at the time the invention was made to modify the aforementioned combination of Graves and of

Art Unit: 2835

Taylor by providing it with blocking members as taught by Jackobson in order to enhance the safety of the device.

## Allowable Subject Matter

- 10. Claim 31 is allowed.
- 11. Claims 11-22 and 24-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 12. The following is a statement of reasons for the indication of allowable subject matter: regarding claim 11, the claim recites "the whole of said housing is light-transmissive"; regarding claims 12-20 and 31, claims 12 and 31 recite "said blocking member also having a cam surface...to be engaged by said neutral prong";

regarding claims 21 and 22, claim 21 recites "said neutral prong extends a greater distance from said housing than said live prong";

regarding claims 24-26, claim 24 recites "a tip portion...is formed from said insulating material".

The aforementioned limitations <u>in combination</u> with remaining limitations of claims 11, 12, 21, 24, and 31, are believed to render said claims 11, 12, 21, 24, and 31 and, consequently all of the dependent claims patentable over the art of record.

Page 9

Art Unit: 2835

### Conclusion

13. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure:

US/5004435, 3775727, 3938068, 2597600, 4861827, 4547827, 5590010, 5451173, 5383799, 4111516, 4934962, and 4275374 disclosed plugable adapters with circuit protection means.

US/5641311, 3513435, 3710287, 5897398, and 6109977 disclosed electrical plugs with partially insulated prongs.

US/4897049 disclosed plugable adapter with blocking member.

GB/2356621 and GB/2220188 disclosed electrical plugs with Braille markings.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anatoly Vortman whose telephone number is 703-308-7824. The examiner can normally be reached on 9:30-6:00, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Darren Schuberg can be reached on 703-308-4815. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3431 for regular communications and 703-305-3432 for After Final communications.

Art Unit: 2835

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

Anatoly Vortman Primary Examiner Art Unit 2835

A.V. March 10, 2003 A. Valu